Consider the following database schema :

- Instructor(*InstNo*, Name, Rank)
- Student(*StudentNo*, Name, Address, EnrollD, GraduatedD)
- Course(*CourseNo*, Title, nbHours, InstNo)
  InstNo references Instructor(InstNo)
- Take(*StudentNo*, *CourseNo*, Grade)
  StudentNo references Student(StudentNo)
  CourseNo references Course(CourseNo)

Exercise 1
Write in TSQL the following views :

(a) A view that gets for each instructor the total number of teaching hours.

(b) A view that for each student lists the name, the enrolled courses and the mark of each course.

(c) A view that gets the succeeded students

(d) A view that gets for each student, the name and the grade average according to the following rules :

- if average(grade) between 0 and 5, the grade should be 'D'
- if average(grade) between 6 and 10, the grade should be 'C'
- if average(grade) between 11 and 16, the grade should be 'B'
- if average(grade) between 16 and 20, the grade should be 'A'

(e) A view that finds for each course how many students passed it

Exercise 2
Write the following complex queries using the **with** clause :

(a) A query that gets the student(s) (id, name, mark average) who has the highest grade average

(b) A query that gets the courses (student's name, title, grade) of the student who has the highest grade average

(c) A query that lists students (id, name) of the instructor who teaches the greatest number of hours

(d) A query that finds names of courses with the highest enrollment